Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Comprehensive Review of Universal Service Fund Management, Administration, and Oversight	)	WC Docket No. 05-195
	)	
Federal- State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Schools and Libraries Universal Service Support Mechanism	)	CC Docket No. 02-6
	)	
Rural Health Care Support Mechanism	)	WC Docket 02-60
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109
	)	
Changes to the Board of Directors for the National Exchange Carrier Association, Inc.	)	CC Docket No. 97-21

REPLY COMMENTS OF THE INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION AND THE CONSORTIUM FOR SCHOOL NETWORKING ON THE NOTICE OF PROPOSED RULEMAKING AND FURTHER NOTICE OF PROPOSED RULEMAKING (FCC 05-124)

INTRODUCTION

The International Society for Technology in Education (ISTE) and the Consortium for School Networking are pleased to provide reply comments to the Commission on issues raised in its recent Notice of Proposed Rulemaking on universal service and the E-Rate program.

The International Society for Technology in Education (ISTE) is the trusted source in education technology for professional development, knowledge generation, and advocacy. A nonprofit membership organization, ISTE provides leadership and service to improve teaching and learning by advancing the effective use of technology in PK-12 and teacher education. Home of the National Educational Technology Standards (NETS), the Center for Applied Research in Educational Technology (CARET), and the National Educational Computing Conference (NECC), ISTE represents more than 85,000 worldwide leaders and potential leaders in educational technology.

Founded in 1992, the Consortium for School Networking (CoSN), a national non-profit organization, is the premier voice in education technology leadership. CoSN's mission is to serve as the national organization for K-12 technology leaders who use technology strategically to improve learning. CoSN's membership includes a unique blend of technology leaders from the public and private sectors. Our audience includes key technology leaders (often called Chief Technology Officers—CTOs) in leading-edge states and districts, as well as those technology leaders who wish to accelerate their districts' or states' systemic technology use.

CoSN and ISTE have both been active participants before the Commission in proceedings related to the E-Rate, individually and in partnership with the Education and Libraries Networks Coalition (EdLiNC), as representatives of many of the thousands of educational institutions that benefit from the E-Rate program.

Our participation in this proceeding reflects our members' commitment to ensuring the long-term viability of the E-Rate program.

While we address a number of issues raised by the Commission in its NPRM, we have five major points to make in this proceeding:

1. As educators, ISTE and CoSN believe that, in order to determine the true merit of the program and to better define its mission, the Commission should implement performance measures that focus on whether students' and teachers' computing devices, or the wireless hubs that serve them, have the requisite connection speed and bandwidth to make use of advanced, pedagogically critical telecommunications services and digital content. Therefore, ISTE and CoSN recommend that the Commission should institute an initial three to five year goal of establishing one Gigabit per second connections for each of the three critical connections that determine actual speed to the desktop: a) current average connection speeds between WANs (or LANs) and the Internet (upstream and downstream); b) current average connection speeds between WANs and district buildings; and c) current average connection speeds inside the building to the desktop computing device or wireless router. Once three years have elapsed under the new performance measures system, we recommend that the Commission reevaluate whether schools' available connection speeds and bandwidth are

adequate by assessing their current and future educational needs and by comparing schools' connectivity rates to those employed in the private sector. Finally, in order to assist efforts to develop and implement new performance standards, ISTE and CoSN support the creation of best practices and guidance for schools preparing to develop networks or upgrade existing networks and recommend that all best practices and unwritten program guidelines be compiled in an easily accessible location.

2. ISTE and CoSN adamantly oppose transforming the E-Rate into a formula grant program or expanding E-Rate support to non-telecommunications related services. We agree with the many initial respondents to the NPRM that these proposed changes would severely undermine the program's mission to serve low-income and rural populations, the ability of local entities to make decisions on services, and the Commission's own efforts to deter waste, fraud and abuse in the program.

3. ISTE and CoSN believe that the imposition of stricter sanctions on applicants and vendors who repeatedly and knowingly violate important program rules is the best means to prevent waste, fraud and abuse. Therefore, we propose a graduated system that establishes appropriate sanctions for applicant and vendor violators based on the seriousness of the offenses. We also support USAC's proposal for allowing debarment for a "substantial pattern of

misconduct" and recommend that USAC's list of sanctionable offenses should be incorporated into ISTE's and CoSN's proposed sanctions system. We oppose the adoption of new rules or guidelines on funding caps, goldplating, maximum service prices, and three-bid minimums for competitive bidding because rules designed to accomplish the very same goal – deterring waste, fraud and abuse – are just now coming into effect.

4. ISTE and CoSN support the Commission's goal to simplify the application process and, towards that end, agree with the proposal advanced in the NPRM to allow multi-year applications for Priority I service. We also recommend that the Commission carefully review the numerous streamlining proposals offered by initial commenters, including the proposal put forth by the American Library Association. Finally, we recommend that the Commission impose deadlines on USAC to complete annual processing of all applications, to conclude reviews of and pronounce final determinations on applicant appeals, and to complete audits. We also urge the Commission to take all steps within its power to assist USAC in its efforts to meet these deadlines.

5. ISTE and CoSN reiterate their support for school and library representation on USAC's board and propose including a district technology leader on the Board. Having a USAC Board member familiar with the application and appeals processes would provide USAC and the Commission with valuable real world

insights and solutions to E-Rate problems. ISTE and CoSN also reiterate their support for the formal establishment of a practitioner panel to guide USAC and Commission decisions on the E-Rate.

DISCUSSION

I. ISTE AND COSN REITERATE THEIR SUPPORT FOR THE DEVELOPMENT AND IMPLEMENTATION OF NEW E-RATE PERFORMANCE MEASURES THAT EVALUATE THE PROGRAM'S SUCCESS BASED ON THE AVAILABILITY OF ADEQUATE CONNECTION SPEED AND BANDWIDTH TO STUDENT AND TEACHER DESKTOP COMPUTING DEVICES

The Commission seeks further comment on developing new performance measures for the E-Rate program. In our initial comments to the NPRM, ISTE and CoSN explained that the current method of measuring E-Rate success based solely on classroom connectivity rates is a misleading and outmoded approach. Given the objectives of the statute, as well as the overwhelming evidence of rapid changes in classroom technologies and services, we recommended that performance measures should go beyond the mere fact of connectivity and determine whether individual learners and educators are provided with the connection speeds and bandwidth necessary to gain access to the latest educational technologies, services, and applications. In these Reply Comments, we not only reiterate our support for performance measures that consider the growing needs of students and teachers for faster speeds and greater bandwidth but also propose specific measurements and a plan for implementing them.

As an initial matter, we note that every initial comment that spoke to the issue of new performance measures supported an upgrade to the current performance measures. Most importantly, numerous commenters, including The Council of Chief State School Officers (CCSSO), Los Angeles Unified School District (LAUSD), the State E-Rate Coordinators Alliance (SECA), the West Virginia DOE/ Office of Technology and Information Systems (WVDOE), and the Council of Great City Schools (CGCS) agreed with ISTE and CoSN that speed and bandwidth measurements must play a central part of any new performance measures. For example, SECA suggested that the Commission consider a measure that equates actual bandwidth usage with current technologies being used in schools and libraries. Likewise, CGCS recommended measuring the level of bandwidth end users require to access resources and applications, and whether their capacity is meeting those goals.

ISTE and CoSN, together with all of the above organizations, recognize that assessing the availability of adequate speed and bandwidth to individual students and teachers must be the preeminent measure of the E-Rate's success. Therefore, we have investigated specific performance measures that would rate the program's success based on adequate speed and bandwidth and propose a specific plan to implement these measures.

We have concluded and recommend the following:

1) E-Rate performance measures must measure the speed of three different types of applicant connections: current average connection speeds between WANs (or LANs) and the Internet (upstream and downstream), current average connection speeds between WANs and district buildings, and current average connection speeds inside the building to the desktop computing device or wireless router. We believe that new performance measures must take into account connectivity speeds for all three measures because slow speeds in any of them could cause major desktop Internet access delays and create unnecessary obstacles to students, teachers and community members making use of valuable online materials.

2) Each connection must have a minimum speed of one Gigabit per second to allow E-Rate recipients to make the most effective use of E-Rate supported Internet access and to preclude unnecessary delays and disruptions.

3) The E-Rate should set as an initial goal for the program the attainment of one Gigabit per second for all three connections over the next three to five years.

4) Once three years have elapsed under the new performance measures system, the Commission should reevaluate whether schools' available connection speeds and bandwidth are adequate by assessing their specific educational needs and comparing school connectivity speeds and bandwidth to those available in other high-tech sectors of the economy.

We propose the initial goal of one Gigabit per second because we believe current uses of educational technology by all schools – elementary through secondary school – clearly support the need for that level of connectivity. Observations of current classroom practice confirm that students and teachers use a wide-array of telecommunications services and digital content with which their networks struggle to keep pace, including: electronic card catalogs and grade books; interactive whiteboards for classroom lessons; video streamed content to augment in-classroom lessons; videoconferencing equipment to communicate with schools around the country and across the globe; and collaborative learning technologies such as interactive educational simulations. School administrators also use applications

that require high-bandwidth networks such as IP video surveillance, remote access to specialists, online announcement systems, and automated attendance programs.[1] However, school networks are struggling to keep up because many of these applications require higher speeds and bandwidth than many schools currently possess.

One particularly telling example that demonstrates the need for greater speed and bandwidth comes from the Chicago Public Schools, which is upgrading all of its 100 high schools from a T-1 Internet connection to a one Gigabit per second connection. According to Chicago, downloading a two-volume encyclopedia (which equates to a three foot tall shelf of books) takes nine minutes at T-1 speeds and only .8 seconds with its new one Gigabit per second Ethernet.

Another example comes from UnitedStreaming, a digital video-on-demand service provided by Discovery Education, which offers over 20,000 digital videos and 4,000 digital pictures for educational purposes. In order for one computer to access these videos or pictures, a minimum connection speed of 256kbps or 700kbps is necessary. However, when multiple workstations in a single school are downloading and accessing the information simultaneously, the need for increased speed and bandwidth is dramatically intensified. We understand that similar issues can arise

[1]Allied Telesyn, "iNet: Network Connectivity for K-12 Classrooms." 2005, available at http://www.alliedtelesyn.com/applications/details.aspx?6.

for schools making use of videoconferenced courses streamed from museums, libraries and other knowledge institutions.

A recent ISTE survey of key technology leaders confirms that low connection speeds today are preventing many districts from adequately supporting advanced educational applications. Here is a sampling of survey responses received:

- The 32,000 student **Irving Independent School District in Texas** reports that 45 megabit per second connection between its wide-area network and the Internet "causes slowdowns and timeouts with certain web-based services," particularly desktop videoconferencing.
- Administrators at the rural, 920-student **Arp Independent School District**, also **in Texas**, indicated that the district has been unable to offer interactive television courses because of lower connectivity speeds between its wide area network and the Internet and between some of its buildings. Arp's survey respondent stated specifically: "As small-town folks, Arp students need to have more diverse cultural experiences and be exposed to different points of view. This can be done through online distance collaborations and multi-cultural projects. My daughter is currently teaching English in China, but our connectivity issues don't allow us to benefit from her broadband

communication capabilities. This is definitely an issue for rural America."

- **Socrates Intermediate School District**, a regional services consortium in **Minnesota**, indicates that while most of its 92 buildings can use most applications, videostreaming, interactive television and Internet2 are not possible to all buildings because of insufficient bandwidth.
- **Nauset Public Schools**, a small district **in Orleans, Massachusetts**, reports: "We can view Internet sites without a problem, but (our) bandwidth limits the download and transfer speed of large files, limits video streaming capacity and capability, and results in bottlenecks at certain times of the day."
- **Chicago Public Schools in Illinois,** which have T-1 connections to all of its 100 high schools, stated that " almost all High Schools used the entire bandwidth of the T-1 circuit for long periods of time during the school day. This means painfully slow Internet connectivity for all devices within the school. This obviously hinders the fundamental purpose of leaning utilizing technology such as computers and the Internet.

A 2003 report by the Corporation for Education Network Initiatives in California (CENIC) illustrated that schools needed at least T-1 level speeds to access current

and future applications but that higher speeds were greatly preferred. The report specifically states:

> Even small schools need a minimum connection at T-1 speed (1.5Mbps) to utilize [commonly used applications such as multimedia presentations, web casts, and high quality, high resolution video]. Generally, however, speeds of DS-3 (45 Mbps) and greater are best to support these uses and are required where multiple simultaneous users exist. Although lower connections afford some level of access to multimedia resources, differences in network speeds can produce huge variations in the quality of a student's learning experience.
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> For example, downloading a 45-second instructional video (7MB file) with a dial-up connection to the Internet, using a 56kbps modem, would take a student about 16.7 minutes. With a connection at 128kbps over a technology called ISDN, the time would be 7.2 minutes, and with a low-end so-called DSL connection the wait would be 2.3 minutes. However, with a T-1 connection, the time required would be reduced to 37 seconds; with a DS-3 connection, it would take merely 1 second.
>
> These figures graphically demonstrate why it is widely believed that connection speeds below T-1 are not adequate to support on-line resources. High speed networking is not simply a matter of convenience; it is the defining factor in whether or not an on-line resource is usable in the classroom.[2]

Additionally, forecasts of schools' technology needs indicate that even greater speed and bandwidth will be needed to support future technological applications. For example, five years from now, according to a recent paper prepared by CoSN, current speeds and bandwidth will not be sufficient to support the growing demand for interactive and multimedia educational resources:

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[2] Corporation for Education Network Initiatives in California, "Broadband Networks in K-12 Public Education: *Achieving Last Mile Connectivity to California Schools*" Los Alamitos, CA: CENIC Digital California Project, 2003, pp. 5 – 7, available at http://www.cenic.org/pubs/reports/lastmilejune03.pdf.

> In 2010, educators and students will have an array of new technology tools available to help them join online learning communities and manage the learning process. Everyone may have a personal learning space on the Internet, with smart search engines; virtual tutors, mentors and planners; "learning objects" of short, multimedia content delivered just when they need help; learning chat rooms; and project work areas.
>
> Teachers and administrators will have the ability to develop and manage a host of day-to-day tasks — creating and managing terms and courses, enrolling students in new courses, generating reports; and communicating with students, parents and colleagues. They'll also have new ways of assessing students on many dimensions of performance, not just high-stakes tests.[3]

Some organizations have already begun to press for global access to one Gigabit connectivity. CENIC, for example, has launched the "One Gigabit or Bust Initiative" which aims to develop and implement a Gigabit connection by 2010 to every educational institution, business, and home in California. A 2004 report commissioned by CENIC discusses the initiative and explains that, "A goal of one Gigabit modeled on historical growth patterns is modest" and "at a minimum, one Gigabit will be required for emerging applications such as holographic image projection for use in virtual meetings, telemedicine and distance learning."[4]

We propose an initial goal of three to five years for one Gigabit per second connectivity for all three connections based on observations of steady growth in

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[3] Consortium for School Networking, "Learning Spaces 2010," Washington, D.C.: Consortium for School Networking, 2005, pp. 14-15.

[4] The Corporation for Education Network Initiatives in California, "One Gigabit or Bust – A Broadband Vision for California." 2004, available at http://www.cenic.org/gb/pubs/gartner/report/contents.htm.

school bandwidth and recommendations from education technology leaders. Over the past three years, the State of Pennsylvania's Technology Inventory Summary has depicted strong, continuous growth in bandwidth usage in public schools, demonstrating that one Gigabit per second bandwidth is a realistic goal in the next three to five years. In 2003, only 30.6% of Pennsylvania schools had Internet access at greater than T-1 levels (1.54 megabits per second). By 2004, the percentage of schools with greater than T-1 access had grown to 40%. Today, more than 53% of Pennsylvania's schools enjoy Internet access at greater than T-1 speeds. Indeed, many Pennsylvania schools are already moving beyond the 100 megabit per school level, with 11.1% using 155 megabits per second,

Many of the ISTE experts surveyed indicated that they already had one Gigabit per second in at least one of their three major connections: Arp Independent Schools, Texas; Irving Independent Schools, Texas; Socrates Intermediate School District, Minnesota; and Eastern Upper Peninsula Intermediate School District, Michigan. Chicago Public Schools is currently embarked on upgrading all of its 100 high school connections out to the Internet from T-1 to 1 Gigabit per second, allowing for data transmission speed to increase by a factor of 650. Citing the impossibility of determining bandwidth needs far into the future, a number of ISTE survey respondents thought that one Gigabit per second for each of the three major connections was an achievable goal.

Once three years have elapsed under the new performance measures system, ISTE and CoSN recommend that the Commission, along with USAC, develop additional performance measure metrics focused on bandwidth and speed. We recommend further that post-one Gigabit measurements be based on an analysis of current and future connectivity needs, with a focus on the amount of bandwidth needed to deliver effectively the latest online and digital education applications.

We also believe that the Commission's and USAC's calculation of future performance measures should take into account the amount and type of connectivity available in the private sector. In making this recommendation, we are lending our support to ideas advanced in comments filed by CCSSO and the E-Rate Service Provider Forum (ESPF) that performance measures should be crafted by comparing classroom connectivity with other high-tech sectors of the economy. We agree with ESPF that such measures would be valuable to ensure that those served are prepared to transition to the tools used in the private sector.

According to a report prepared by the Corporation for Education Network Initiatives in California, the role of schools in preparing today's students for the technological workplace of the future is tremendous:

> Post-industrial nations are moving toward an "always-on" connected society in which computers and handheld communications devices are increasingly viewed as personal, lifestyle accessories. These devices support social and economic interaction, as well as work needs. Above all, the connected society represents an "anytime, anywhere" universe of information and services, real-time interactions and collaboration, virtual communities, and integrated multimedia communications. All

> of this requires broadband networking and the technologies that support its use.
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> Education, at all levels, stands at the center of this social and technological revolution. The next generation of citizens must be trained to cope with, navigate and benefit from the connected society. The crucial question may be whether the educational system itself can be a leader in this effort. Ubiquitous broadband deployment in California's schools guarantees the infrastructure necessary to ensure that public education can be a leader, and positions public education to help all students obtain the technical knowledge and skills necessary to succeed in the 21st century.[5]

ISTE and CoSN firmly believe that the goal of establishing one Gigabit connections in schools within the next three to five years is not only plausible, but absolutely necessary to building a 21st century workforce and achieving the E-Rate's goal of providing schools access to valuable telecommunications services and applications.

However, while ISTE and CoSN recognize that increased speed and bandwidth are necessary to keep schools connected to current technological applications and services, we strongly oppose measuring what applicants can do with their bandwidth, as USAC suggested in its initial comments to the NPRM. Specifically, USAC proposed a performance measure which would tie program success to whether applicants are making optimal current use of the level of connectivity provided by E-Rate. ISTE and CoSN oppose such a

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[5] The Corporation for Education Network Initiatives in California, "Broadband Networks in K-12 Public Education: *Achieving Last Mile Connectivity to California Schools*" Los Alamitos, CA: CENIC Digital California Project, 2003, available at http://www.cenic.org/pubs/reports/lastmilejune03.pdf.

proposal because: 1) such measures would likely not reflect favorably upon rural users and low-income districts that lack adequate funds to invest in advanced and cutting-edge applications (as noted by General Communications, Inc. in its initial comments); 2) such measures would narrow unnecessarily visions for what schools and districts should be doing with their speed and bandwidth; and 3) such measures do not take into account what advanced applications applicants may look to deploy in the future

Additionally, ISTE and CoSN strongly oppose using academic-type measures, such as those found in the Enhancing Education Through Technology program (EETT), to measure E-Rate success. While some commenters, such as Qwest Communications and Miami-Dade County Public Schools, support the concept of using non-telecommunications measures such as those associated with thee EETT program, ISTE and CoSN agree with the Commission that it is inappropriate to measure the program's success with benchmarks outside of the connectivity realm. As we stated in our initial comments, the E-Rate program is specifically focused on providing telecommunications services and, therefore, it is inappropriate to assess its success through non-telecommunications performance measures. Furthermore, ISTE and CoSN agree with USAC, who opposed using EETT measures, stating that they do not view them, "standing alone, as especially meaningful indicators of Schools and Libraries program performance."

For any new performance measure scheme to work, the Commission and USAC must implement a data collection process that collects and analyzes more than the existence of public school classroom connections to the Internet. The Commission and USAC must take steps to collect information on bandwidth and speed available to all three critical connections – between WANs (or LANs) and the Internet, between WANs and district buildings, and inside buildings to the desktop computing devices or wireless routers – as a prelude to the institution of new performance measures. To further this process, we reiterate our support for EdLiNC's proposal to use current E-Rate application forms, such as Form 471, to collect information for performance measure purposes. We recommend that the current outmoded queries on that form be replaced with questions on connectivity speed for all three critical connections.

Finally, ISTE and CoSN reiterate their support for the creation and compilation of best practices and guidance for schools preparing to develop networks or upgrade existing networks. In order to assist efforts to develop and implement new performance standards, we recommend that the Commission and members of the non-profit education community compile best practices and all unwritten program guidelines in an easily accessible location. We believe that best practices models would assist schools in developing their networks and would also help prevent unnecessary waste of precious E-Rate resources. However, CoSN and ISTE oppose codifying all unofficial USAC processing rules, as some commenters have suggested. If these rules are codified, they become virtually impossible to alter or modify, thereby hindering the efficient evolution of the program.

II. ISTE AND COSN ADAMANTLY OPPOSE TRANSFORMING THE E-RATE INTO A FORMULA-BASED PROGRAM AND EXPANDING ITS SUPPORT TO NON-TELECOMMUNICATIONS RELATED SERVICES

The Commission seeks further comment on whether the E-Rate program should be converted into a formula-based program. In our initial comments to the NPRM, ISTE and CoSN expressed our strong opposition to this proposal. In the comments that follow, we maintain that the Commission should not transform the E-Rate into a formula-based program, nor should it expand E-Rate support to non-telecommunications related services. ISTE and CoSN firmly believe that in order to protect the interests of rural and urban applicants, preserve local decision making on services, and ensure the sanctity of the E-Rate's current stable funding stream, the E-Rate program must remain an application based program that prioritizes funding based on need.

The vast majority of commenters who filed initial comments on this issue agreed with ISTE and CoSN and opposed the concept of turning the E-Rate into a formula grant program. Organizations such as the Alaska Department of Education (ADOE), the American Library Association (ALA), the Arkansas E-Rate Working Group (AEWG), CCSSO, Chicago Public Schools (CPS), the Council of Great City Schools (CGCS), EdLiNC, ESPF, Kellogg & Sovereign Consulting, LLC (KSC), the Missouri Education and Research Network (MORENet), the New York City Department of Education (NYCDOE), On-Tech, SECA, and Trillion Partners, Inc.

all opposed a formula due to concerns that applicants in small and rural areas would be disadvantaged and local decision making would be significantly reduced.

We take particular note of comments filed by the Alaska Department of Education that clearly demonstrated the difficulty of designing a formula that factored in applicant needs and program goals. Among the factors that ADOE indicated any E-Rate formula would have to take into consideration were: 1) balancing applicant size, cost of delivery and economic need in every area of the country; 2) preserving local choice in type of technology used and level of sophistication of that technology; and 3) apportioning appropriately funds between schools with innovative and intense technology needs that cost significantly and others content with their current technology levels and therefore needing fewer funds.

In spite of the overwhelming opposition to converting the E-Rate into a formula-based program, a small number of organizations came out in support of the concept. However, the failure of these proposals to protect rural and low income applicants and to take account of the yearly planning needs of school districts renders them unworkable. For instance, the Florida Public Service Commission supported a formula grant to the state level based on the relative poverty level of the state and the number of students enrolled in eligible schools. Under this plan, funds would be distributed by the states following the current priorities, but applicants would not, as now, be able to receive funds disproportionate to their poverty level. In our view,

this proposal, if implemented, would serve as a technological leveler, depriving rural and smaller schools of the support necessary for them to take advantage of the most advanced applications.

Greg Weisiger of the Virginia Department of Education also supported the formula concept and proposed a formula for Priority II services only plus a reduction of the top level discount rate for Priority II services from 90% to 70%. Under his scheme, after Priority I funding demand is established, every district or library would receive a base allocation of $2,000 for Priority II services. All funds in this scheme would flow from USAC to the district or library branch level, not to the state, and the district would have authority to allocate its allotment to target particular sites. ISTE and CoSN strongly oppose this proposal because it would make it virtually impossible for districts to plan since they would have little idea year-to-year how much Priority II funding they might receive. Furthermore, it would triple the cost of Priority II services for 90% applicants, thereby defeating a key purpose of the program – to provide poorer schools with access to technological applications and services.

Finally, Sprint/Nextel supported a formula for Priority I services where, "eligible schools and libraries would receive a flat 50% discount off" a more limited list of eligible telecommunications and Internet access services. While noting that some schools would receive less funding under this approach, Sprint/Nextel stated that the proposal would eliminate forms, speed-up the process, and reduce administrative errors. Although it does not support a formula for Priority II

services, Sprint/Nextel recommended that applicants assign greater weight in their competitive bidding process to bids received from those companies that contribute to the universal service fund. ISTE and CoSN oppose this proposal because it would not only ensure that many applicants pay substantially more for Priority I services but would de facto rig Priority II bid competitions in favor of incumbent telephone companies through the requirement that they receive preference in the competitive bidding process, thereby compromising the statute's principle of competitive neutrality.

Overall, ISTE and CoSN oppose any proposal, no matter how well intentioned, that would destabilize the E-Rate program and jeopardize its existence. Therefore, we maintain our opposition to transforming the E-Rate into a formula grant program. We believe that the NPRM's formula proposal and other similar proposals advanced in initial comments lack the support of the vast majority of the applicant community as is evident from a review of the initial comments filed. Moreover, any formula would severely undermine the program's mission to serve low-income and rural populations, the ability of local entities to make decisions on services, and the Commission's own efforts to deter waste, fraud and abuse in the program.

ISTE and CoSN also reiterate their opposition to expanding services eligible for discount to non-telecommunications services. The E-Rate program is oversubscribed each year for the telecommunications and Internet services that it offers currently.

Expanding the use of E-Rate funds to other useful but not currently supported services would further strain the fund and impair efforts to continue the E-Rate's core mission of ensuring affordable access to advanced telecommunications services.

III. ISTE AND COSN REITERATE THEIR SUPPORT FOR REASONABLE EFFORTS TO DETER WASTE, FRAUD AND ABUSE, INCLUDING IMPOSING STIFFER SANCTIONS ON APPLICANTS AND VENDORS WHO REPEATEDLY AND KNOWINGLY VIOLATE IMPORTANT PROGRAM RULES, BUT DECLINE TO SUPPORT PER ENTITY CAPS, GOLDPLATING GUIDANCE, MAXIMUM SERVICE PRICE GUIDELINES, AND THREE BID MIMIMUMS FOR COMPETITIVE BIDDING.

The Commission seeks further comment on rules to combat waste, fraud and abuse, and whether it should adopt specific rules requiring greater scrutiny for previous rule violators. As stated in our initial filing, ISTE and CoSN support reasonable efforts to deter waste, fraud and abuse. Therefore, we support developing a graduated sanctions system to punish those who repeatedly and knowingly violate important program rules. However, we oppose four proposals included in the NPRM – establishing per entity caps, creating detailed guidance on what constitutes goldplating, setting maximum prices for services, and requiring that all applicants obtain a minimum of three competitive bids before entering into a contract – that aim to deter waste, fraud and abuse.

ISTE and CoSN believe that the imposition of stricter sanctions on applicants and vendors who repeatedly and knowingly violate major program rules is the best deterrent to preclude waste, fraud and abuse. In our original comments we

submitted a proposal for a clear, graduated system that establishes appropriate sanctions for applicant and vendor violators based on the seriousness of the offenses. The proposal suggests that the Commission adopt a sliding scale of violations – ranging from Class 1 (least severe) to Class 5 (most severe).

The concept of stricter sanctions for rule-violators garnered support among those commenters who discussed the issue of sanctions, including CGCS, CPS, and Trillion. For instance, CGCS supported a sanctions scheme similar to that proposed by ISTE and CoSN, stating that it supports "appropriate oversight and greater scrutiny" and that "penalties should become more severe depending on the level or continued reoccurrence" of the offense.

USAC also supported the concept of stiffer sanctions and suggested establishing a lower debarment threshold for service providers, consultants and applicants than the current standard, which permits debarment only for those criminally convicted or held civilly liable for actions taken in relation to the E-Rate. USAC's filing included a list of rule violations that could serve as the basis for determining the existence of a "substantial pattern of misconduct" that would trigger sanctions. These violations include:

- Service provider which pays applicant's share.
- Applicant who did not pay its share.
- Service provider who filled out and submitted FCC Form 470.
- Service provider who provided the RFP.
- Service provider found to have unfairly influenced the competitive bidding process.

- USAC invoiced but services not delivered.
- USAC invoiced, but services not installed when installation was invoiced.
- Non-compliant auditee who fails to respond in a timely manner, or at all, to the non-compliant auditee letter.
- Consultant who is really a service provider but fails to disclose this.

ISTE and CoSN believe that these listed violations represent an excellent first step in determining which program rule violations should lead to sanctions. Therefore, we recommend that USAC's list of sanctionable offenses be incorporated into our original proposed sanctions system in an effort to deter waste, fraud, and abuse.

On the subject of other measures to deter waste, fraud and abuse advanced in the NPRM, ISTE and CoSN oppose the adoption of new rules or guidelines on funding caps, goldplating, maximum service prices, and three-bid minimums because rules that would accomplish the very same goal are just now coming into effect. We urge the Commission to defer adopting any of these proposals until it conducts an evaluation of the efficacy of the twice every five years and equipment transfer rules in reducing waste, fraud and abuse. Heaping still more program rules on already beleaguered applicants will only sow confusion and deter their willingness to participate in the program. Additionally, we have the following substantive concerns about each of the four proposals that appear in the NPRM:

A. <u>Funding Caps</u>

ISTE and CoSN reiterate their opposition to establishing caps on the amount of funding applicants can request. We are joined in our opposition by the majority of commenters who filed comments on this issue including ADOE, CGCS, CPS, ESPF, KSC, MORENet, and USAC. All of these organizations opposed any form of caps because they would be overly complex to formulate and could create perverse incentives for applicants and service providers. We note that USAC, in its comments, opposed a "per entity" cap because it would fail to address the root causes leading to waste, fraud and abuse and because new Commission rules – the twice every five years internal connections rule and the equipment transfer prohibition rule – are already addressing the issue. USAC also indicated another significant risk in imposing a per entity cap – creating a perverse incentive for applicants "maximizing funding as close to the cap as possible." ADOE, for its part, worried about service providers raising prices of services or equipment immediately to the cap level. For all of these reasons, we continue to believe that the establishment of funding caps is decidedly not in the best interests of the program.

B. Gold-Plating

In our comments opposing changing the E-Rate into a formula-based program, we stated that one of our central concerns with any formula was that it would hamstring forward thinking applicants who sought very high connectivity speeds and bandwidth to further legitimate pedagogical goals. We stated further that we could conceive of no formula that allowed such districts the amount of E-Rate

support that they needed to implement such connectivity. The same holds true for gold plating. Creating artificial limits on E-Rate support, based on entity size or apparent need, unduly restricts the vision of many applicants, leading smaller and more rural schools and libraries to scale-back their visions for what online resources that they can and would like to deliver to their students, teachers and patrons. For these reasons, we cannot support the establishment of goldplating rules or guidelines.

C. Maximum Service Prices

ISTE and CoSN disagree with the NPRM's proposal to develop maximum price levels for covered services because such guidelines are impractical. We agree with the rationale for rejecting maximum price guidelines that USAC offered in its comments:

> USAC's experience suggests that maximum prices would likely become outdated quickly as a result of the pace of technology change and industry competition. Additionally, the maximum price will be dependent on quantity and geographical location. Further, USAC's experience with the Eligible Products Database to date has been that service providers are reluctant to provide pricing data—most service providers have not completed the optional "approximate price" field in the database.

D. Three Bid Minimums

In the NPRM itself, the Commission questioned the practicality of applicants in rural and remote areas obtaining three competitive bids each year. Bearing in mind that the E-Rate program was designed specifically to serve rural areas because they

lacked affordable access to telecommunication and advanced services options, ISTE and CoSN believe that this proposal would unfairly penalize such eligible entities and violate the intent of the Act and the spirit of the E-Rate program.

IV. ISTE AND COSN SUPPORT EFFORTS TO STREAMLINE THE APPLICATION PROCESS, INCLUDING ALLOWING MULTI-YEAR PRIORITY I APPLICATIONS, BUT URGE THE COMMISSION TO ESTABLISH DEADLINES FOR USAC'S COMPLETING PROCESSING OF APPLICANT FUNDING COMMITMENTS, APPEALS AND AUDITS

The Commission seeks further comment on USAC's performance as administrator of the USF. ISTE and CoSN maintain that the Commission should undertake efforts to streamline the application process, including allowing multi-year Priority I applications, but also should establish deadlines for USAC's processing of applicant funding commitments (for Priority I, by August 1; for Priority II, by October 15) and appeals (90 days). ISTE and CoSN also support establishing audit review deadlines as a means of ensuring that E-Rate funds flow more quickly to applicants caught up in reviews.

In furtherance of the Commission's, USAC's and our own objective of simplifying the application process, we urge the Commission to carefully review the numerous streamlining proposals offered by initial commenters, including the proposal put forth by the American Library Association. As the Commission considers these and other application streamlining proposals, we recommend that any streamlining changes strike the appropriate balance between reducing applicant and service

provider paperwork and maintaining appropriate deterrents to waste, fraud and abuse.

V. ISTE AND COSN RECOMMEND PLACING A SCHOOL DISTRICT TECHNOLOGY LEADER ON THE USAC BOARD AND THE FORMAL ESTABLISHMENT OF A PRACTITIONER PANEL TO GUIDE USAC DECISION MAKING

The Commission seeks further comment on the current structure of USAC, particularly whether it is designed to be competitively neutral and represent all interested parties. In the original comments filed on this issue, ISTE and CoSN suggested that the Commission should retain school and library representation on USAC's Board and formally establish a practitioner panel to guide USAC's decision-making. In the following comments, we reiterate our support for these proposals and suggest that a district technology leader be included on the USAC board.

Several of the organizations that commented on these issues not only agreed that the Commission should retain school and library representation on USAC's board but supported increasing the numbers school and library representatives on the USAC Board. For example, NYCDOE supported including one board member from each large city school system on the USAC Board, while LAUSD supported including one representative from a large school district and another from a small school district. Similarly, CGCS recommended that a local program administrator serve as one of the education representatives to the USAC Board.

We agree that increased school and library representation would be beneficial to the program's operation. However, we differ slightly from other commenters who recommend that representatives be based on district size. ISTE and CoSN believe that including a district technology leader on the USAC Board would greatly improve the Board's understanding of the real world application of its decisions. A district technology leader possesses both the special knowledge of the needs of the applicant community and an institutional knowledge of the E-Rate program that could translate into more practical and better received policy pronouncements.

Finally, ISTE and CoSN reiterate their support for the formal establishment of a practitioner panel to guide USAC and Commission decisions on the E-Rate. In the original comments to the NPRM, this proposal was supported by a number of commenters including the NorthEast Iowa Library Service Area E-Rate Consortia and the Wisconsin Department of Public Instruction. These organizations supported the creation of a formal advisory board drawn from state E-Rate coordinators and school and library staff to provide "real world" advice to the Commission. This Task Force would aid USAC by examining issues that they consider important as well as issues referred to it from USAC or the FCC and deliver to USAC and the FCC reports and recommendations on such issues. We believe this would be an important adjunct to having an actual district technology leader on the Board.

CONCLUSION

ISTE and CoSN appreciate the opportunity to comment in this most important proceeding. In summary, we support the following positions relative to this filing:

1. The Commission should develop and implement new E-Rate performance measures that measure the program's success based on the availability of adequate connection speed and bandwidth to student and teacher desktop computing devices or the wireless hubs that serve them. The Commission should institute an initial three to five year goal of establishing one Gigabit connections for each of the three critical connections that determine actual speed at the desktop: a) current average connection speeds between WANs (or LANs) and the Internet (upstream and downstream); b) current average connection speeds between WANs and district buildings; and c) current average connection speeds inside the building to the desktop computing device or wireless router. Once three years have elapsed under the new performance measures system, the Commission should reevaluate whether schools' available connection speeds and bandwidth are adequate by assessing their current educational needs and comparing school connection speeds and bandwidth to those available to private companies.
2. The Commission should not transform the E-Rate into a formula-based program, nor should it expand E-Rate support to non-telecommunications related services.
3. The Commission should undertake reasonable efforts to deter waste, fraud and abuse, including imposing stiffer sanctions on applicants and vendors who repeatedly and knowingly violate important program rules, but should not establish funding caps, goldplating rules, maximum service price guidelines, and three bid minimums for competitive bids.
4. The Commission should undertake efforts to streamline the application process, including allowing multi-year Priority I applications, but also should establish deadlines for USAC's processing of applicant funding commitments, appeals and audits.
5. The Commission should include a district technology leader on USAC's Board and formally establish a practitioner panel to guide USAC decision-making.

We look forward to continuing to work with the Commission and USAC to preserve and strengthen the E-Rate program.

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Respectfully submitted,

INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION
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